

### ABSTRACT OF THE DISCLOSURE

A gear stage detection device according to the present invention comprises output shaft side pulse generating means (21) for generating a pulse in a number which corresponds to a rotary phase of an output shaft (9) of a transmission (T/M), input shaft side pulse generating means (20) for generating a pulse in a number which corresponds to a rotary phase of an input shaft (8) of the transmission (T/M), and gear stage determining means (16) for determining the current gear stage by inputting the output shaft side pulse and input shaft side pulse generated respectively by the pulse generating means, counting the number of input shaft side pulses generated when a unitary number (25pls) of output shaft side pulses has been reached, and comparing the counted input shaft side pulse number with the unitary number of input shaft side pulses which is predetermined for each gear stage of the transmission.